Portland Harbor Superfund Site
Community Information Session
Environmental Protection Agency
5 – 8 p.m. August 22, 2013
BES Water Lab
6543 N Burlington Ave Portland, OR

These notes were taken by Barbara Smith, Lower Willamette Group, and are not verbatim. These notes mostly reflect the Q/A with the audience, and the presentation comments are summarized.

Representing EPA - Alanna Conley, Chip Humphrey, Kristine Koch, Sean Sheldrake

Alanna Conley provided the welcome and introductions, meeting agenda and successful meeting tips.

Jim Robison, Portland Harbor CAG, also welcomed those attending and described the work of the CAG. He announced its meetings dates – 2nd Wednesday, 6 – 8 p.m. at the BES Water Lab. A more informal public education session is held the Monday prior to the CAG meeting for those wanting more basic information about the PH Site and the Superfund process.

Chip Humphrey spoke to slides on the Superfund Process, and the history of the PH Site (attached).

Questions during Chip's presentation:

Q - What about innovative technologies?

A – Several are considered in the Feasibility Study, including carbon amending of sediment and biogenesis.

Q – How long do caps and CDF last?

A – They will be built for long term/in perpetuity monitoring.

Sean Sheldrake spoke to slides about the construction of a Confined Disposal Facility (attached).

Public outreach is a part of the process of determining if a CDF is feasible for PH. EPA may go in a different direction. EPA needs the 60 percent design to make a decision. Upland landfill disposal costs are known, but the cost of disposal into a CDF is not. The design review process needs to be accurate enough so EPA can determine which contaminants could go into a CDF or if one should be built at all.

Sequencing of cleanup is important and the T4 early action is one of several early action cleanups proposed within the site. EPA will start cleanups with the hot spots first to avoid recontamination of the river.

Q – What about the sturgeon, fish, pond turtles, beavers and other animals at T4?

A – We will get to that in this presentation.

Q – Isn't it true that when the Army Corps of Engineers first designed CDFs they were only for clean

dredge materials?

A – This is a good point. Over the past 50-70 years dredge materials were used as nearshore fill, but the use of CDFs for contaminated sediments started in more recent times – 1980s..

Q – What about earthquakes?

A – The design can withstand a magnitude 9 earthquake.

Q – How long will it take to build?

A – As long as it takes to dredge at the site – 10 years or more. Fish windows control when dredging can occur in the harbor to protect migrating endangered species.

Q – What is an engineered cap?

A – Clean gravel is placed over sediments.

Q – Why build an earthen berm?

A – The berm is made of high specified material and the center is sand, which is the filtering system to meet performance standards. We won't put sediments in the CDF that have chemicals that are very mobile and leach. For example, the Gasco waste would not be able to go into a CDF.

Q – What about mercury?

A – All chemicals were looked at in the design review.

Q – Is it really built to leak?

A – It is built to contain the contaminants and allow water to filter back to the river.

This is year 5 or 6 of public comments – changes to the original design came from comments about earthquakes and leaking that were given to EPA from the CAG and others.

Q – What about the Silver Valley, Idaho CDF issue? Didn't it fail and poison the community?

A – The release was from a 100-year-old pipe that failed – the pipe was built by a mining company; it collapsed and houses fell into sinkholes and people were exposed. There was a presidential emergency declaration because of the problem, but it was never a repository for contaminated waste.

Q – What about performance over time – we are not building it more than once and standards change over time?

A – Good points – the monitoring will be in perpetuity and the solution needs to take that into account.

Q – Why locate it here – is it about cost savings?

A – Cost is one criterion. We will be piping the material into the CDF versus trucking it with thousands of trucks going through someone's neighborhood. Onsite management is done at large sites. We can't cap it all, as it would impact flooding, shipping, etc. Dredging is an option to break the pathway to the food chain. T4 and Swan Island Lagoon are considered because that is where the contamination is in the river, within the boundaries of the 11 miles of the site.

Q – What are the guarantees about the "oops" – the accidents that have occurred elsewhere – are we learning from the best management practices?

A – I hope we are learning but still steps have to be taken regardless of the remedy. Construction quality assurance is important and we are double checking everything.

Q – How are you double checking a magnitude 9 earthquake, tidal influences, floods, etc? Engineers have a hard time because Mother Nature always wins.

A – Climate change is a design issue and we need to ensure the CDF is safer than the BMPs for flooding. As for earthquakes, it wouldn't sluice out – your home and businesses would be more destroyed.

Kelly Madalinski (Port of Portland) – EPA requires us to use industry standards and one is seismic. The berm will be 300' wide at the bottom and 100' at the top so it would be more stable.

Stu Albright (Apex consulting for the Port) – We analyzed two types of earthquakes and compared to how similar berms have withstood earthquakes in California, Japan, Chile, etc. Berms have survived in those areas. We account for liquefaction. The most likely failure will be the non-designed shorelines along the Willamette. The bank just outside this building was not designed and this building is built on fill, it would more likely fall into the river.

Q – How will you keep PCBs out and will they volatize? Are the chemicals "color coded" so you know which ones are in the "toxic stew"?

A – Certain levels of contamination will be acceptable but there will be a range. We aren't really concerned about volatization of PCBs, but we will conduct air monitoring.

Q –How quickly will you get results?

A – About three days. This will be a many month process, so we will have time to make adjustments if we need to.

Q – What about Gasco and the fish kill – there were problems?

A – We learned a lot from that and we will apply site specific best management practices.

Q – What is the berm built on?

A – (Stu Albright) it is built on the compact sands over the bedrock of the river. It will be placed after the removal of loose sands. We have a lot of subsurface information – more than any other project in

my lifetime. By the way, the core is not sand, the bulk of it is gravel.

Q – How much water will flow through the berm?

A – Permeability will be very low. The contamination adheres to the mud and doesn't want to go through the contamination – it is like a brick, the water will flow around it and it could take 100-200 years for water to go through the actual contamination.

Q – When you fill it, what happens to the water inside?

A – The filling process is a separate design – it will only be filled at a rate that water will seep out through the filter of the berm.

Q – What about the fish and wildlife?

A – Habitat would have to be mitigated if it is lost.

Q – Why are CDFs put in poor neighborhoods?

A – Because the contaminated sediments are here. We don't want to truck it through the neighborhood, and there are other issues related to greenhouse gas emissions, etc.

Q – What are the risks of the contamination relocation process?

A – More spillage risks, greenhouse gas emissions, barge transportation and transfer are a few of the risks.

Q – Would you allow others to put their dredge materials here? What if it gets filled, would you open another one? Would you live here?

A – We would not take materials from other areas. Yes, I would live here. Capacity depends on the amount of dredged contaminated sediments.

Q – Why hasn't there been as much design on the other technologies?

A – Not very many have ever been used full scale, but we are looking at all of them.

Q – How much has been spent on the CDF study versus the other technology studies?

A – The FS screens about 40 technologies.

Q – Personal Privacy / Ex. 6 – There are about 3,000-5,000 fish in that lagoon. How will you get them out and get the water out? If you build at Swan Island Lagoon, you will take out one of only three public boat ramps on the lower river.

A – We will have a fish salvage operation to bring them to the other side of the berm before all the water flows through.

Q/Statement – Travis Williams – A CDF could make sense and be better than leaving all the contaminated sediments in the harbor. No technology is out there that is going to do the same. People need to recognize it is better than leaving it in the river.

Q – The LWG is the driver of the CDF and the City is a member of the LWG. Will the City take public comment on its position on this?

A – Jim McKenna (LWG) – The LWG was asked to include a CDF in all of its options of the FS – there are two options where a CDF is not needed. The other options all consider the use of a CDF or the use of off-site disposal.

A – Kim Cox (City of Portland) – Public involvement is important to the City of Portland. The City will have a position on the proposed plan, and we expect to have comment from the community on that. Nothing is planned at this point but we will have outreach.

Q – Why don't you put the material somewhere where it can be cleaned up in the future?

A – No option is perfect and technology could change in the future.

Q – Why is there not more piloting testing of new technologies?

A – EPA is considering pilot testing on the Duwamish waterway, which is a similar site to the Willamette.

Q – Will each alternative be brought to a 60 percent design stage?

A – Sixty percent was needed to answer questions about a CDF. We don't need that type of design process for the components of each FS alternative.

Q – What is the exposure to the community of the "toxic stew" over ten years?

A – We will be monitoring the construction process and then long-term monitoring of the CDF once it is built in perpetuity.

Q – What is the volume of material that will go into the CDF?

A – That depends on the remedial levels selected and the amount of material dredged. There are two parts to EPA's decision. First is to determine the level of contamination that needs to be address – that changes the footprint of the dredging. Then we determine if it can go to a CDF or needs to be sent somewhere else.

Jim Robison – can we have a CAG presentation on this subject in September please?

Q – What are the financial constraints to limiting our vision to this? Who benefits the most?

A – Cost is just one of the nine criteria for selecting remedies. Others include short-term impacts, implementability etc. The first two are being protective and meeting local laws. Cost is one of the balancing criteria.

A – (Kelly Madalinski) There is more to this than cost – it isn't the first consideration nor the second. An early design had the Port creating a new upland terminal area with rail, etc. but that is no longer the design. This is not a money-maker for the Port.

Q – Barbara Quinn – Other solutions haven't had enough consideration. Why can't EPA force the PRPs to pay more? Chevron spent $36 billion in exploration last year. Why can't we hold them responsible for more of a share of cleaning this up? They should have to clean up before they explore for more ways to pollute the environment.

A – Polluter pay is still in effect. There is an allocation process going on now that EPA is not a part of. EPA will make its decision and the PRPs will make a good faith offer for settlement. EPA is also considering requiring the PRPs to create a reserve account for long-term monitoring. That would be a part of the settlement.

Q – What about biogenesis and cement-lock technologies?

A – Those are still on the table and EPA is thinking of asking the LWG to consider some form of carbon amending of sediments before disposal.

Q – We need trust; this is not a shell game. You are talking in technical language, and we don't have this in English, so why should be trust you?

A – We agree the level of your trust will color your view of the process, so we want to do what we can to build that trust.

Q – Why not design and build a sophisticated, state-of-the-art plan to treat the sediment and return it to the river?

A – There is no proven technology that exists to do that.

The meeting concluded and attendees were encouraged to continue to speak to presenters afterward.